DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

This declaration is of the following type:

- (X) original
- () design
- () supplemental
- () national stage of PCT

My residence, post office address, and citizenship are as stated below next to my name. I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled.

"High Performance Powdered Metal Mixtures For Shaped Charge Liners"

the specification of which: (check one)

- () is attached hereto.
- (X) was filed on February 7, 2000, as Application Serial No. 09/499,174, and was amended on -- (if applicable)
- () was described and claimed in PCT International Application No. -- filed on -- and as amended under PCT Article 19 on -- (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information known to be material to the patentability of any claim in accordance with Title 37, Code of Federal Regulations, §1.56, and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

LABEL UNDER MPEP §201.06(c)

- 1 - This copy of the Declaration and Power of Attorney is for the attached application submitted herewith.

PRIOR FOREIGN APPLICATION(S)

<u>Number</u> <u>Claimed</u>	Country	Day/Month/Year Filed		<u>Priority</u>
		- NONE -	() Yes () Yes	() No () No

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

Number Claimed Month/Day/Year Filed

This declaration is of the following type: (if applicable)

- () divisional
- () continuation
- () continuation-in-part(CIP)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

ApplicationFilingStatusSerial No.DatePatented/Pending/Abandoned

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. WILLIAM E. SHULL, Reg. No. 29,438; WILLIAM M. IMWALLE, Reg. No. 35,904; ROBERT A. KENT, Reg. No. 28,626; PAUL I. HERMAN, Reg. No. 37,349; WILLIAM R. PEOPLES, Reg. No. 25,906, CRAIG W. RODDY, Reg. No. 36,256 and EUGENE R. MONTALVO, Reg. No. 32,790 of HALLIBURTON ENERGY SERVICES, INC., P. O. Box 819052, Dallas, Texas 75381-9052 and STEVEN W. SMITH, Reg. No. 36,684; SHREEN K. DANAMRAJ, Reg. No. 41,696 and LAWRENCE R. YOUST, Reg. No. 38,795 of SMITH & DANAMRAJ, 12900 Preston Road, Suite 1200, LB 15, Dallas, Texas 75230-1328.

SEND CORRESPONDENCE TO:

DIRECT TELEPHONE CALLS TO:

LAWRENCE R. YOUST Smith & Danamraj 12900 Preston Road, Suite 1200, LB 15 Dallas, Texas 75230-1328 LAWRENCE R. YOUST (972) 720-1202

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

1	David J. Leidel		
	Full Name	Inventor's Signature	Date
F. (3)	6602 Cliffwood Court Arlington, Texas 76016 Residence		U.S.A. Citizenship
	6602 Cliffwood Court Arlington, Texas 76016 Post Office Box		
2.	James Phillip Lawson Full Name	Jams Hully Lus Inventor's Signature	JUNE 29-2
	807 Xavier Mansfield, Texas 76063 Residence		U.S.A. Citizenship
	807 Xavier Mansfield, Texas 76063 Post Office Box		

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

This declaration is of the following type:

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- () supplemental
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"High Performance Powdered Metal Mixtures For Shaped Charge Liners"

the specification of which: (check one)

- () is attached hereto.
- (X) was filed on February 7, 2000, as Application Serial No. 09/499,174, and was amended on (if applicable)
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LABEL UNDER MPEP §201.06(c)

This copy of the Declaration and Power of

1. Attorney is for the attached application submitted
herewith.

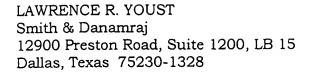
PRIOR FOREIGN APPLICATION(S)

Number C Claimed	Country	Day/Month/Year F	<u>iled</u>		<u>Priority</u>
		- NONE -		()Yes ()Yes	
	•	benefit. under Tit pplication(s) listed	le 35, United States below:	Code, §1	19(e) of any
. <u>N</u>	umber Claim	ed <u>Month/Day/</u>	Year Filed		
This de	eclaration is of t	he following type: (if applicable)		
\ /	divisional continuation continuation-ir	ı-part (CIP)	r Long of the William Programmer of the Salas	valage to a product that again for	.wey b Ja Cii
application(s) application is first paragraph information as	listed below a not disclosed in n of Title 35, Ur defined in Title	and, insofar as the in the prior United S hited States Code, § a 37, Code of Feder	United States Code, § subject matter of ea States application in the §112, I acknowledge the al Regulations, §1.56(a) national or PCT intern	ch of the one manner properties of the contract of the contrac	claims of this ovided by the close materia urred betweer
Application Serial No.		Filing Date	Status Patented/Pending/Aba	andoned	

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. WILLIAM E. SHULL, Reg. No. 29,438; WILLIAM M. IMWALLE, Reg. No. 35,904; ROBERT A. KENT, Reg. No. 28,626; PAUL I. HERMAN, Reg. No. 37,349; WILLIAM R. PEOPLES, Reg. No. 25,906, CRAIG W. RODDY, Reg. No. 36,256 and EUGENE R. MONTALVO, Reg. No. 32,790 of HALLIBURTON ENERGY SERVICES, INC., P. O. Box 819052, Dallas, Texas 75381-9052 and STEVEN W. SMITH, Reg. No. 36,684; SHREEN K. DANAMRAJ, Reg. No. 41,696 and LAWRENCE R. YOUST, Reg. No. 38,795 of SMITH & DANAMRAJ, 12900 Preston Road, Suite 1200, LB 15, Dallas, Texas 75230-1328.

SEND CORRESPONDENCE TO:

DIRECT TELEPHONE CALLS TO:



LAWRENCE R. YOUST (972) 720-1202

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

1	David J. Leidel	David Leigh	6-8.200U
	Full Name	Inventor's Signature	Date
ļ	6602 Cliffwood Court		U.S.A.
	Arlington, Texas 76016		Citizenship
	Residence		
	6602 Cliffwood Court		
	Arlington, Texas 76016		
	Post Office Box		
2	James Phillip Lawson		
	Full Name	Inventor's Signature	Date
ŀ	807 Xavier		U.S.A.
	Mansfield, Texas 76063		Citizenship
	Residence		
	807 Xavier		
	Mansfield, Texas 76063	,	
	Post Office Box		

ASSIGNMENT

IN CONSIDERATION OF TEN DOLLARS (\$10.00) cash in hand paid to me by HALLIBURTON ENERGY SERVICES, INC., and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, DAVID J. LEIDEL and JAMES PHILLIP LAWSON, having made an invention in an "HIGH PERFORMANCE POWDERED METAL MIXTURES FOR SHAPED CHARGE LINERS" while in the employ of HALLIBURTON ENERGY SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, doing business at 2601 Beltline Road Carrollton, Texas, 75006, (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in a "HIGH PERFORMANCE POWDERED METAL MIXTURES FOR SHAPED CHARGE LINERS";
- 2. United States of America patent application on said invention. Attorney File No. 990084 U1 USA, U.S. Serial No. 09/499,174, filed February 7, 2000 executed by us, entitled "HIGH PERFORMANCE POWDERED METAL MIXTURES FOR SHAPED CHARGE LINERS";
- 3. All applications for patent or like protection on said invention that have now been or may in the future be made by us or our legal representatives, whether in the United States of America or any other place anywhere in the world;
- 4. All patents and like protection that have now been or may in the future be granted on said invention to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
- 5. All substitutions for and divisions, continuations, continuations-inpart, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitations, those obtained or permissible under past, present and future law and statues;
- 6. All rights of action on account of past, present and future unauthorized use of said invention for infringement of said patents and like protection;

- 7. The right to ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and
- 8. All international rights of priority associated with said invention, applications, patents and like protection; and we covenant that we, our heirs, legal representatives, assigns, administrators, and executors will at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment.

of	EXECUTED at Ampon	County,	Texas, on th	18 84h	day
----	-------------------	---------	--------------	--------	-----

STATE OF Texas 5 COUNTY OF Johnson 5

BEFORE ME, the undersigned authority, on this day personally appeared **David J. Leidel** known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the day of ______, 2000.

DARLENE HATCH NOTARY PUBLIC State of Texas Comm. Exp. 10-20-2000

Notary Public

[SEAL]

My Commission Expires:

/0	IPE YOU
(J	UL 1 7 2000 35
To the second	PRADEMARK

James Phillip Lawson

STATE OF TEXAS S COUNTY OF TAKRANT S

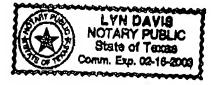
BEFORE ME, the undersigned authority, on this day personally appeared James Phillip Lawson known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 3949 day of JUNE, 2000.

Notary Public

(SEAL)

My Commission Expires: $\partial/|k|/\partial\beta$





UNITED STAY & DEPARTMENT OF COMMERCE Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TORRESPORDER

OF PATENTS AND TRADEMARKS Washington, D.C. 20231

OCTOBER 03, 2000 ...

· PTAS

HALLIBURTON ENERGY SERVICES, INC. WILLIAM M. IMWALLE P.O. BOX 819052, MAIL CODE 1-B-121 LEGAL, INTELLECTUAL PROPERTY DEPARTMENT DALLAS, TX 75381



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231,

RECORDATION DATE: 07/17/2000

REEL/FRAME: 010999/0743

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR''S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

LEIDEL, DAVID J.

DOC DATE: 06/29/2000

ASSIGNOR:

LAWSON, JAMES PHILLIP

DOC DATE: 06/29/2000

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC. P.O. BOX 819052
LEGAL, INTELLECTUAL PROPERTY DEPARTMENT
DALLAS, TEXAS 75381

SERIAL NUMBER: 09499174

PATENT NUMBER:

FILING DATE: 02/07/2000

ISSUE DATE:

LABEL UNDER MPEP §201.06(c)

This copy of the Notice of Recordation of Assignment Document and Assignment are for the attached application submitted herewith.

010999/0743 PAGE 2

PAULA MCCRAY, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

	08-19-2000	
FORM PTO-1399 CORDATIC		S. DEPARTMENT OF COMMERC Patent and Trademark Office
the Honorable Commissioner of Patents and Trade	101437284	.nt or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving part	y(ies):
David J. Leidel James Phillip Lawson Additional name(s) of conveying party(ies) attached? □ Yes ☒ No	Name: Halliburton Energy Service Internal Address: Legal, Intellectua Street Address: P.O. Box 819052	l Property Department
3. Nature of conveyance:	City: Dallas State	: Texas ZIP: 75381
□ Assignment □ Merger □ Security Agreement □ Change of Name □ Other	Additional name(s) & address(es) attac	hed?□Yes ⊠ No
Execution Date: June 29, 2000		<u> </u>
4. Application number(s) or patent number(s): 09/499,174 If this document is being filed together with a new application, the ex	ecution date of the application is:	
A. Patent Application No.(s)	B. Patent No.(s)	
09/499,174		ويوني المراجع المراجع
	I Imbers attached? □ Yes ☑ No	
3. NAME AND ADDRESS OF SERVICE VALUE OF A SERVICE AND A SERVICE OF SERVICE AND A SERVICE OF SERVICE AND A SERVICE	& Mumbon of sentionsions and assess in	
5. Name and address of party to whom correspondence concerning document should be mailed; Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121	6. Number of applications and patents in	ivalved: <u>i</u>
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121 Street Address: P.O. Box 819052	6. Number of applications and patents in 7. Total fee (37 CFR 3.41)	
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121 Street Address: P.O. Box 819052		
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121	7. Total fee (37 CFR 3.41)	\$ <u>47,00</u>
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121 Street Address: P.O. Box 819052	7. Total fee (37 CFR 3.41)	
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121 Street Address: P.O. Box 819052	7. Total fee (37 CFR 3.41)	to deposit account
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121 Street Address: P.O. Box 819052 City: Dallas State: Texas ZIP: 75381	7. Total fee (37 CFR 3.41) © Enclosed Nathorized to be charged 8. Deposit account number: 08-0300	
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121 Street Address: P.O. Box 819052 City: Dallas State: Texas ZIP: 75381 DO NOT US! 9. Statement and signature. To the best of my knowledge and belief, the foregoing information document. PAUL I. HERMAN Name of Person Signing Signature	7. Total fee (37 CFR 3.41)	to deposit account aying by Jeposit account)
Name: William M. Imwalle Internal Address: Legal, Intellectual Property Department Halliburton Energy Services, Inc. Mail Code 1-B-121 Street Address: P.O. Box 819052 City: Dallas State: Texas ZIP: 75381 DO NOT US: 9. Statement and signature. To the best of my knowledge and belief, the foregoing information document. PAUL I. HERMAN Name of Person Signing Signature POOOD DNGUYEN 00000255 080300 09499174	7. Total fee (37 CFR 3.41)	to deposit account aying by Jeposit account) is a true copy of the origina